Varlation in *Campylobacter* Incidence and Isolation: Ecology or Testing?

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Campylobacter was the most commonly isolated bacterial foodborne pathogen in the Foodborne Diseases Active Surveillance Network (FoodNet) in 1997. Regional differences in isolation rates have been observed for this pathogen, yet reasons for these differences need to be explored more fully. In 1997, we conducted active surveillance for laboratory culture-confirmed cases of *Campylobacter*iosis and surveyed the 264 clinical laboratories that processed stool samples for bacteria] pathogens from a population of 16.1 million persons in 5 FoodNet sites (CA, CT, GA, MN, and OR). There were 3630 isolations reported by laboratories that completed a laboratory survey, resulting in a rate of 22.5 isolations per 100,000 persons with a range of 8.4 in GA to 29.4 in CA. The median stool positivity rate was 16.8 per 1,000 stools processed for *Campylobacter* ranging from 0.7 to 104.0 per 1,000. Statistically significant positive associations ($p<0.05$) were found between stool positivity rates and use of rejection criteria for stools received without transport media and use of 42°C for incubation of *Campylobacter* screening plates. Though not statistically significant, positive associations were also found between stool positivity and higher proportions of specimens received as whole stools, and the use of commercial packs for creation of microaerobic atmosphere. This study indicates that variation in laboratory practices plays a role in the observed variation in *Campylobacter* isolation rates, suggesting the need to examine existing stool culture guidelines and to optimize the diagnostic strategies in the United States.

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